

Driving Organizational Sustainability through Green Human Resource Management Practices: An Empirical Study of IT Firms

U.Amaleshwari ^{1*}, R.Masilamani ²

¹ Director, School of Management, D.G.Vaishnav College.

² Research scholar, School of Management, D.G.Vaishnav College,
masila2495@gmail.com¹, amalaumapathi@gmail.com²
(affiliated to University of Madras, Chennai)

Abstract: In contemporary times, the advancement of Green HRM practices to accelerate environmental performance has emerged concern for Organizations. This research investigates the concept of Green HRM Practices through the lens of sustainable business solutions to build green business models in the IT industry. Organizational Changes mitigating the directions on environmental green initiatives, sustainability factors that lead to transition in regional, national, and international development to enhance their commitment and engagement, which highlight their satisfaction in achieving a greener world. Empirical evidence proved the positive impact of Green HRM Practices (GHRMP) on prospective employees with the selective HRM Practices, including Green Selection and Recruitment (GRS), Green Training and Development (GTD), Green Performance Management System (GPMS), Green Compensation and Rewards Management System (GCMS), and Green Employee Relations (GER). The combination of the Ability Motivation Opportunity (AMO) theory enables this study to highlight key practices in growing Sustainable HRM Practices, along with identified elements in the IT Industries. This research examines the repercussions of Green HRM Practices that affect Organization Sustainability (OS) through Employee Perception and Awareness (EPA) as a moderator, which changes in employees' behaviour, Job Satisfaction (JS), and Employee Engagement (EE) as potential mediators. The research framework is established with the defined variables involved in the study, and the results proved Cronbach's alpha measurements for reliability analysis, and supported the results through a non-parametric test. Employee Perception and Awareness (EPA) served as a major factor in establishing Organizational Sustainability (OS) and employee Job Satisfaction. The positive relationship between Employee Engagement (EE) creates sustainability outcomes in organizations to lead to higher Job Satisfaction of employees. The study reveals that Green HRM Practices, including the factors of the best HRM Practices that positively influence the Organization's Sustainability in the IT Industries. The research proved the positive and significant impact of Job Satisfaction and Employee Engagement that equipping the sustainability improvement of the employees. The results also affirm that Employee Perception and Awareness contribute to the sustainability of the organization effectively. The employees and the HR Professional are cultivating the Green HRM Practices and contributing to the sustainable development of the Organization.

Keywords: Green HRM Practices, Job Satisfaction, Employee Engagement, Employee Perception and Awareness, Organization Sustainability, IT Industries, Sustainable HRM Practices.

1.1 INTRODUCTION OF THE STUDY

The global environmental crisis has prompted nations to unite under Sustainable Development Goals (SDGs) for organizational growth and industries' development in a greener way. Sustainability is the “development that meets the needs of the present without compromising the ability of future generations to meet their own needs” (Brundtland Commission, 1987). Organization Sustainability is described as a global initiative for the social, commercial, and scientific levels transformations required to promote equality, well-being, digital revolution, and energy decarbonisation. (Sachs et al., 2019; Anshima et al., 2025)

Organizational hazards are affecting business frameworks and requirements to meet business goals. Industries are adopting sustainable practices, innovation, and strategies for corporate development that synergize the companies' goals and financial improvement, which is efficient for the future vision. (Mandip, 2012)

Green HRM Practices are embedded with HRM Practices that highlight the influence of eco-friendly business activities in the process of human resource operations. Sustainable business practices encourage organizations and Industries to positively influence their green ranking and sustainability position through employee behaviour. Ecological changes of organizations, motivating their employees to participate in green events, audits, and cultural activities. (Jabbour, 2013)

1.1.2 Green Human Resource Management Practices (GHRMP)

Eco-friendly business activities involved talent management, training, performance evaluation, payroll administration, and participation and involvement management to achieve green business goals. Satisfying firms' business performance, organizing business solutions to contribute to the green transition, to embedding the business goals. (Bos-Nehles A., Renkema M. & Janssen M., 2017).

1.1.10 Employee Perception and Awareness (EPA)

Detailing the importance of Perception and awareness highlighted by the business preference of employees who develop their performance, which is essential for the IT industry development. Corporate industries like Wipro, Infosys, CTS, and others started a program called "Go-Green Awareness Initiatives" for creating social awareness and development on green initiatives. Green HRM practices are identified as crucial programs for helping employees understand about sustainable culture of the organization. Workers must understand the importance of protecting the environment in addition to fulfilling their work-related obligations. (Rizvi & Garg, 2021)

1.1.11 Organization Sustainability (OS)

Bombiak Edyta (2018) mentioned that greener activities to achieve the firm's business goals and vision are embedded with organizational sustainability. Employee perception and knowledge capital, aiming for business standards for organizational sustainability, which depicted a greater impact on improving employee green behaviour to enhance corporate social responsibility by integrating their business activities. Kuria and Mose (2019) described that Green Practices improve customer interactions, cutting costs, enhancing competitiveness, attracting talented employees, and developing the corporate business values. Green HRM Regulations reduce waste, conserve resources, and lower their carbon footprint by encouraging sustainable practices. (Vadithe et al., 2025). It gained its prominence at the Earth Summit of 1992 and its subsequent Johannesburg Declaration of 2002, and is now recognized as the international development agenda. Formulating sustainable practices, policies, and regulations is frequently implemented by businesses and other organizations in the field of human resource management (Amjad et al, 2021).

1.1.12 IT Industries' contribution on Economic growth in India

The IT & BPM sector has become one of the most significant growth catalysts for the Indian economy, contributing significantly to the country's GDP and public welfare. India's IT sector witnessed 16% growth in hiring in April, driven by factors such as artificial intelligence (AI) adoption, cloud modernisation, and the expansion of Global Capability Centres (GCCs). This was accomplished through a mix of government action, commercial innovation, and investment, and new digital applications that are already improving and permeating a variety of activities and different forms of work.

1.1.13 IT Industries' Contribution in Tamil Nadu

Information Technology (IT) and Information Technology Enabled Services (ITES) have emerged as significant contributors to the economic transition and commercial growth. It is poised for robust growth in 2025-26, with overall spending expected to reach \$160 billion and IT exports projected at \$220 billion, accounting for a significant share of global outsourcing. This growth is set to create new jobs, boosting national employment in the IT sectors, with challenges such as skill gaps in emerging technologies, infrastructure limitations in smaller cities, cybersecurity threats, and global economic pressures.

1.2 STATEMENT OF THE PROBLEM

Despite growing awareness of environmental issues and the increasing need for sustainable business practices, many organizations struggle to integrate environmental concerns into their core human resource strategies. Green HRM Practices (GHRMP) has emerged as a strategic approach to align HRM practices with sustainability

goals. However, there is still limited empirical evidence on how specific GHRM practices influence organizational sustainability, particularly in the IT Industries. This research gap hinders the IT industry from effectively leveraging HRM for sustainable development.

1.3 NEED FOR THE STUDY

Information Technology Industries (IT Industries) created 5.4 million job positions in March 2023 while bringing in 290,000 new employment opportunities during fiscal year 2023. India stands as the third-largest country regarding the global artificial intelligence (AI) workforce since its AI professionals make up 16% of total worldwide positions. The state government authorizes operation in 22 designated IT parks. A vast 1.28 million sq. ft. area constitutes the TIDEL Park located in Chennai. TIDCO, along with ELCOT, has established this facility as the biggest technology park in India.

1.4 SCOPE OF THE STUDY

Integration of environmental management with HRM Practices to make the green companies, operations, and functions align with the organization's sustainability initiatives. Companies are now operating in a highly competitive scenario; Meanwhile, they need to differentiate themselves from each other. They identified the employees who are aware of the green concept and strive to take them in their organization to greater heights in environmental values, attitudes, and behaviour. Many researchers and practitioners consider sustainable business practices to be an essential requirement for business organizations to cope with today's commercial and sustainability challenges. Previous studies in the IT Industries explained the conceptual framework with measurements of Green HRM Practices, focusing on the sustainable drivers and outcomes.

1.5 OBJECTIVES OF THE STUDY

1. The main objective of the study is to evaluate the perceived impact of Green HRM Practices on Organizational Sustainability in IT Industries in Chennai.
2. To examine the Green HRM Practices, including the variables Green Recruitment and Selection, Green Training and Development, Green Performance Management System, Green Compensation and Reward Management System, and Green Employee Relations that influence the sustainability factors in the IT Industries.
3. To investigate the relationship between Employee Engagement and the employees that mediate the effective impact on the Organization's Sustainability
5. To understand the effect of Employee Perception and Awareness of the employees on enhancing the Green HRM Practices and Organization Sustainability in the IT Industries
6. To evaluate the mediating effect of Job satisfaction on influencing organizational sustainability in the IT industries of Chennai.

2.1 STUDIES RELATED TO GREEN HRM PRACTICES THAT INFLUENCE ORGANIZATIONAL SUSTAINABILITY

The Green HRM Management concept was initiated by Walter Whemeyer (1996), who integrated HRM functions with environmental management practices to substantiate organizational improvement. Equip the company's growth and development through management operations and performance that align with Environmental Health and Safety management (EHS) programs. Daily and Huang (2001) suggested that HRM Practices are entrenched in the environmental management procedures and compliance goals. Companies are concerned with sustainable deals and protocols for the industry's long-term protection and growth. Masri & Jaaron (2016) investigated the connection between environmental performance and Green HRM Practices in manufacturing companies of Palestine. They emphasized concerns about environmental initiatives to accelerate business development on organizational sustainability.

Ren et al. (2017) defined Green HRM Practices as substantial for the development and growth of environmental sustainability, particularly in academic pursuits. Empirical studies raise green awareness to enhance sustainability in specific industries.

Usman & Mat (2021) described the relationship of Green HRM practices with environmental performance, particularly in developed countries. Research investigation was performed in countries such as Palestine, Pakistan, Sri Lanka, Malaysia, Thailand, and Vietnam. Innovating novelty of research and development, the detailed analysis was

collected from the R&D, IT sector, and other departments of manufacturing industries in Nigeria. Higher-level managers, leaders, and team members eagerly participated in the survey and revealed their knowledge of the Nigerian Stock Exchange. The results implied that stakeholders and practitioners should consider green talent management practices to equip organizational culture (Ogbeibu et al., 2021).

Ahmad (2015) recognized that understanding the dynamics of the relationship between HRM and performance requires a grasp of the “AMO (Ability-Motivation-Opportunity)” model. First, it emphasizes developing employees' potential, which results in high-achieving individuals. (González-Benito & González-Benito, 2006)

Jabbour (2013) integrated environmental sustainability through green training embedded in the organization's training and development modules. Green employee relations management includes recycling management and resource conservation management. The study summarizes organizational training, challenges, and weaknesses, and addresses research gaps in current environmental training trends.

Veerasamy et al. (2024) analysed an empirical analysis of the antecedents of Green HRM Practices, highlighting the organization's ecological development. Achieving the Green economy using recruitment, training, and development that raises awareness to deploy a greener environment. Faeni (2024) inferred that sustainable business influenced eco-friendly business performance in the transportation sector and enhanced the employees' performance. Based on the SEM results, 1130 respondents participated in the Indonesian country. Green HRM Policies and regulations are packed with green business plans, with a sense of the company's sustainable growth and improvement. Sapna & Gupta (2021) highlighted the awareness and growing importance of Green HRM Practices through Green Involvement, Green training and development, and Green Performance Management system. The study revealed that eco-friendly practices nurture sustainable business practices in the various sectors and industries.

Cahya (2021) determined that pollution is the main cause of environmental issues that need to be addressed to enhance green development. In the era of economic development, countries are more focused on organizational development and sustainable operational solutions. The study particularly identified the literature survey associated with Green HRM practices through various environmental factors.

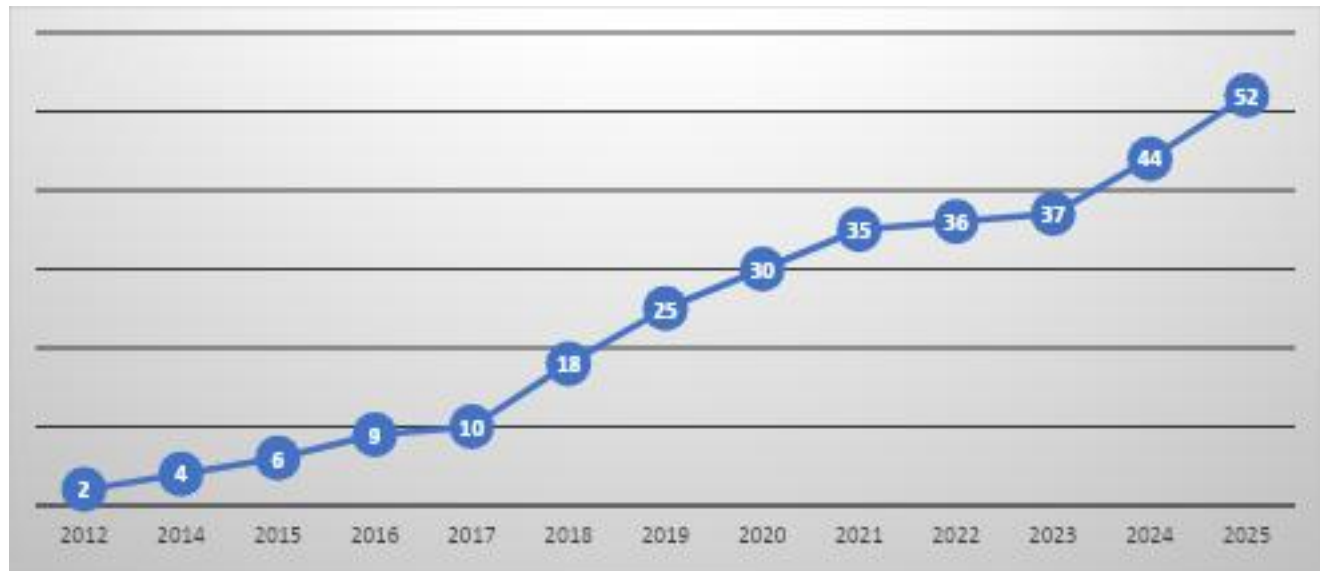
Alreahi et al. (2022) articulated the research novelty in industries with a systematic literature review, structured analysis, and a conceptual framework. The study described the prevalence of Green HRM Practices on environmental performance in various industries, including manufacturing, automobile, chemical industries, and educational institutions. Hameed et al. (2022) demonstrated that pro-environmental behavior plays a crucial role in achieving effective outcomes through CSR factors that mitigate climate change. Ecological activities stimulate employees' pro-environmental behaviors and encourage professional actions.

2.11.4 Publication trend analysis of Green HRM Practices on Organizational Sustainability

The following figure illustrates the trend analysis of the year-wise publication count from 2012 to 2025 relating to the Green HRM Practices impact on the Organization Sustainability using the different databases, including Scopus database, Science Direct, Emerald Publishing, Cogent and Business, Google Scholar, and Web of Science database. Totally 284 articles were collected to illustrate the results of the study.

Figure 1.1

Publication Trend Analysis of Green HRM Practices on the Organization's Sustainability



Source: Author's Preparation

Figure 1.1 illustrates the results of the published articles from the year 2012 to 2025, with the publication count. The research articles are retrieved from the Journal of Cleaner Production, MDPI, Cogent and Business Journals, Science Direct, and Sustainability and Scopus Databases. Based on the results, the impact of the Green HRM Practices on the Organization's sustainability was configured and exhibited. Organizational sustainability, environmental performance, and environmental sustainability played a major role in developing the Green HRM Practices in the Industry context perspective. (Fachada et al., (2022)

2.13 Research Gap Identified from the Study

- The selected variable combinations in this study differ from prior research on Green HRM practices and organizational sustainability.
- While much research examines various industry contexts, this study specifically targets sustainable development in IT organizations.
- Most studies originate from Western countries, Asia, Europe, and India, with limited work conducted elsewhere.
- Previous research on sustainable business practices emphasizes organizational commitment and environmental behavior, but rarely incorporates employee engagement.
- This study reveals current trends and evolving sustainability concepts within IT industries.
- The research framework, centered on employee perceptions and awareness, distinguishes it from prior studies.
- Focusing on Chennai and Coimbatore as major IT hubs provides a unique geographical perspective.
- Unlike previous studies emphasizing environmental performance and sustainability, this research specifically examines organizational sustainability.

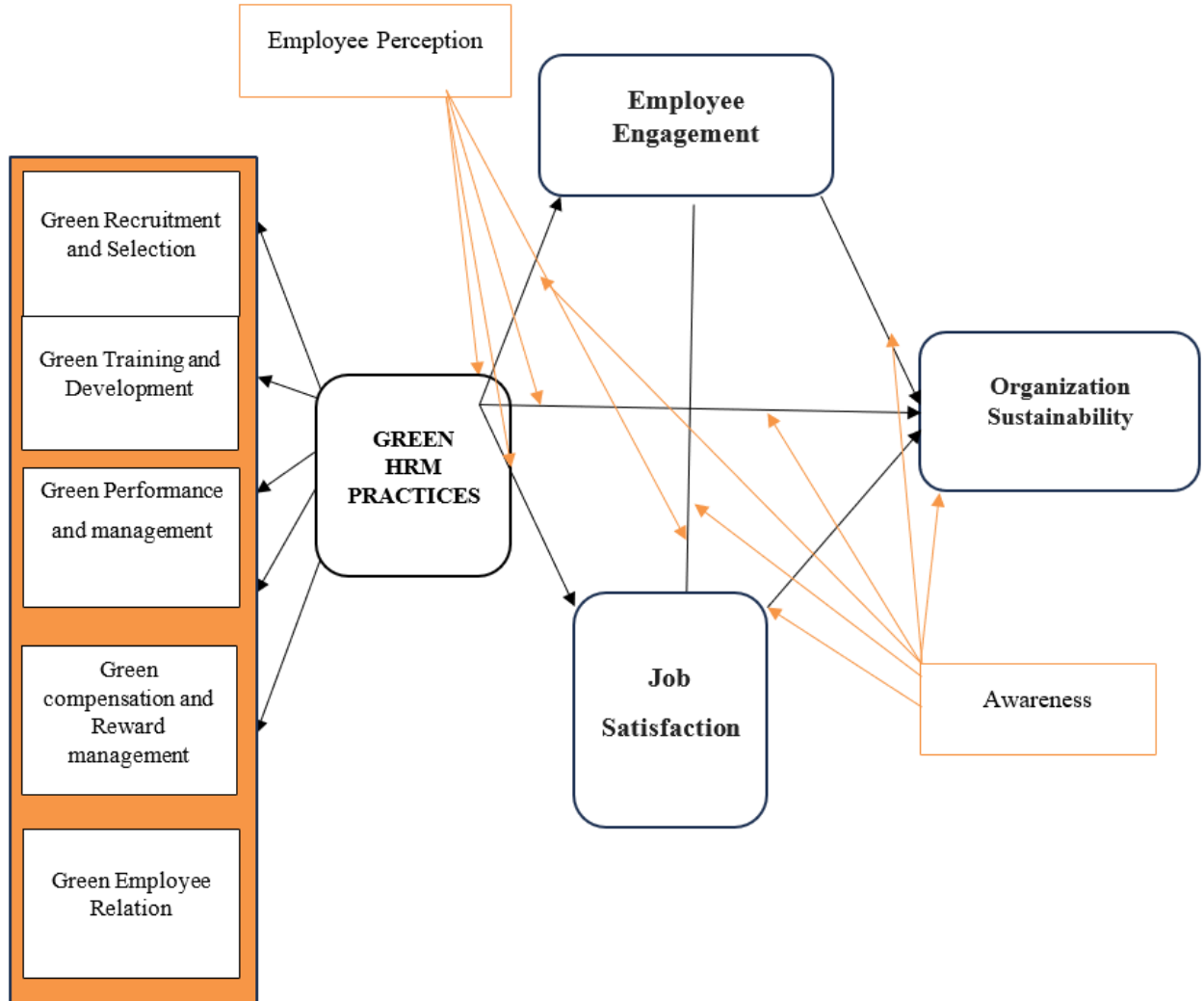
3.3 RESEARCH METHODOLOGY

The research methodology employed non-probability sampling, specifically convenience sampling. The researcher contacted IT employees working in Chennai, Tamil Nadu, to create a survey investigating the association between organizational sustainability and Green HRM Practices from the perspective of IT workers. The questionnaire primarily aimed to collect industry-specific information relevant to IT employees. To analyze the implementation of Green HRM practices toward organizational sustainability, numerous articles were reviewed and evaluated. The study utilized descriptive and analytical research methods in the survey.

3.3.1 PILOT STUDY

The pilot study was conducted in April 2024. A total of 150 questionnaires were issued out of which 105 were responded. After removing the questionnaires without full responses, a total of 102 responses were retained. Hence, the main data collection was started in June 2024. The data were analysed with SPSS version 25.0 and AMOS 21.0. The reliability analysis shows that the Cronbach's alpha values for all the study variables are above 0.7, as suggested by Hair et al. (2017). The result of the correlation analysis shows that it is significantly established between all the study variables, as the p-values are less than 0.05.

Figure 1.2
Conceptual Framework



Source: Author's Preparation

Exploratory Factor Loadings for the Impact of Perceived Green HRM Practices on Organizational Sustainability in the IT Industries

Table 1.1

Factor loadings of the constructs			
	Variable name	Components	

Factor and Variance Explained			Factor Loadings
FACTOR 1: GREEN MANAGEMENT	GCMS2	The organization gives financial rewards, such as recognition, to the employees for their greening performance	0.794
	GCMS3	The company offers non-monetary and monetary rewards based on the environmental achievements (sabbatical, leave, gifts, bonuses,	0.789
	GPMS2	The Organization made the schemes, such as practices and regulations, policies relating to organization sustainability for problem-solving criteria, green champions, and an active group for suggesting schemes	0.775
	GTD2	The firm conducts training programs in environmental management to increase the environmental awareness, skills, and expertise of employees	0.677
	GER2	Promoting the eco-friendliness of the company's products and services by utilizing the existing resources efficiently	0.627
	GTD7	The firm offers practices for employees to participate in environmental management, such as newsletters, suggestion schemes, problem-solving groups, low-carbon champions, and green action teams	0.564
FACTOR 2: GREEN DEVELOPMENT	GER4	The Company states its environmental goals in its annual report.	0.839
	GRS2	The organization uses environmentally friendly (green) practices for shortlisting candidates	0.761
	GCMS4	The firm rewards its employees for green skills and achievement	0.688
	GRS3	The organization prefers to select candidates possessing environmental awareness	0.650
FACTOR 3: GREEN SUSTAINABILITY	GTD8	The firm provides training in EM aspects of safety, energy efficiency, waste management, and recycling	0.871
	GER6	Organisation develops and executes strategies to sustain a favourable work setting to avoid several fitness problems and to develop the health and safety of the workforce.	0.808
	EPA5	The organization recycles used paper and waste disposables	0.837

FACTOR 4: GREEN OPPORTUNITIES	EPA3	The Organization has designed and executed innovative positions to emphasize environmental protection aspects	0.794
	EPA4	The Organization helps to motivate and encourage employees to pursue green HRM practices	0.865
FACTOR 5: GREEN EMPOWERMENT	EMPENG6	I am concerned about the future green development and vision of my company	0.891
	EMPENG5	A Company that continually practices green HRM practices will have a promising future	0.737
	EPA6	Organization conducting interview and joining formality work is being carried out paperless	0.565
	EMPENG2	Company employees are concerned about environmentally friendly activities	0.488
FACTOR 6: GREEN ECONOMY	OS6	The Organization has changed my attitude and behaviour toward environmental sustainability.	0.804
	OS3	Providing opportunities for the employees to learn the new courses relating to the organization's sustainability, encouraging them for on the organization's environmental development.	0.775
	OS7	I like to prefer environmentally friendly products.	0.755
	OS5	The Organization encourages using more solar energy.	0.731
	OS4	The Organization developed environmentally sound practices in offices (such as the use of recycled paper, soy ink, double-sided printing, and copying, recycling toner cartridges).	0.711
	OS8	The green initiatives taken by the company are considered a competitive strategy.	0.693
	OS2	The Organization strongly encourages to use of special programs by employees to reduce transportation and energy demands (such as telecommuting, flexitime, car-pooling, 4-day work week, special parking places for employees who drive fuel-efficient cars).	0.654

Source: Computed data

Source: Author's Preparation

It is indicated from the results of the factor extraction that the impact of Green HRM Practices on the Organization's sustainability was performed, and the factor loadings (Brown, 2009a) provide the loaded values. It was identified that, based on the Principal Component Method, 26 statements were loaded to extract six factors. The factors were identified and recognized based on the correspondence of the statements. The first identified factor is named

'Green Management', the second factor 'Green Development, and the third factor 'Green Sustainability'. Fourth factor 'Green Opportunities', fifth factor 'Green Empowerment', and sixth factor named 'Green Economy'.

3.3.2 CONCEPTUAL MODEL

The following table summarizes the goodness of fit (GOF) indices for the Conceptual model for Green HRM Practices' influence on the Organization Sustainability. The following table summarizes the goodness of fit indices for the Conceptual Model of The Perceived Impact of Green HRM Practices on the Organization's Sustainability.

The estimated goodness of fit indices and estimated variables' coefficients are given in the following tables.

Table 1.2

Model Fit Summary of the Conceptual Model for The Perceived Impact of Green HRM Practices on the Organization's Sustainability

Indices	X ² /df	P	GFI	AGFI	NFI	TLI	CFI	RMSEA	RMR
Model Value	1.821	0.431	0.935	0.948	0.921	0.965	0.971	0.023	0.041
Recommended Value	<3.0	>0.05	>0.90	>0.90	>0.90	>0.90	>0.95	<0.05	<0.05

Source: Computed data

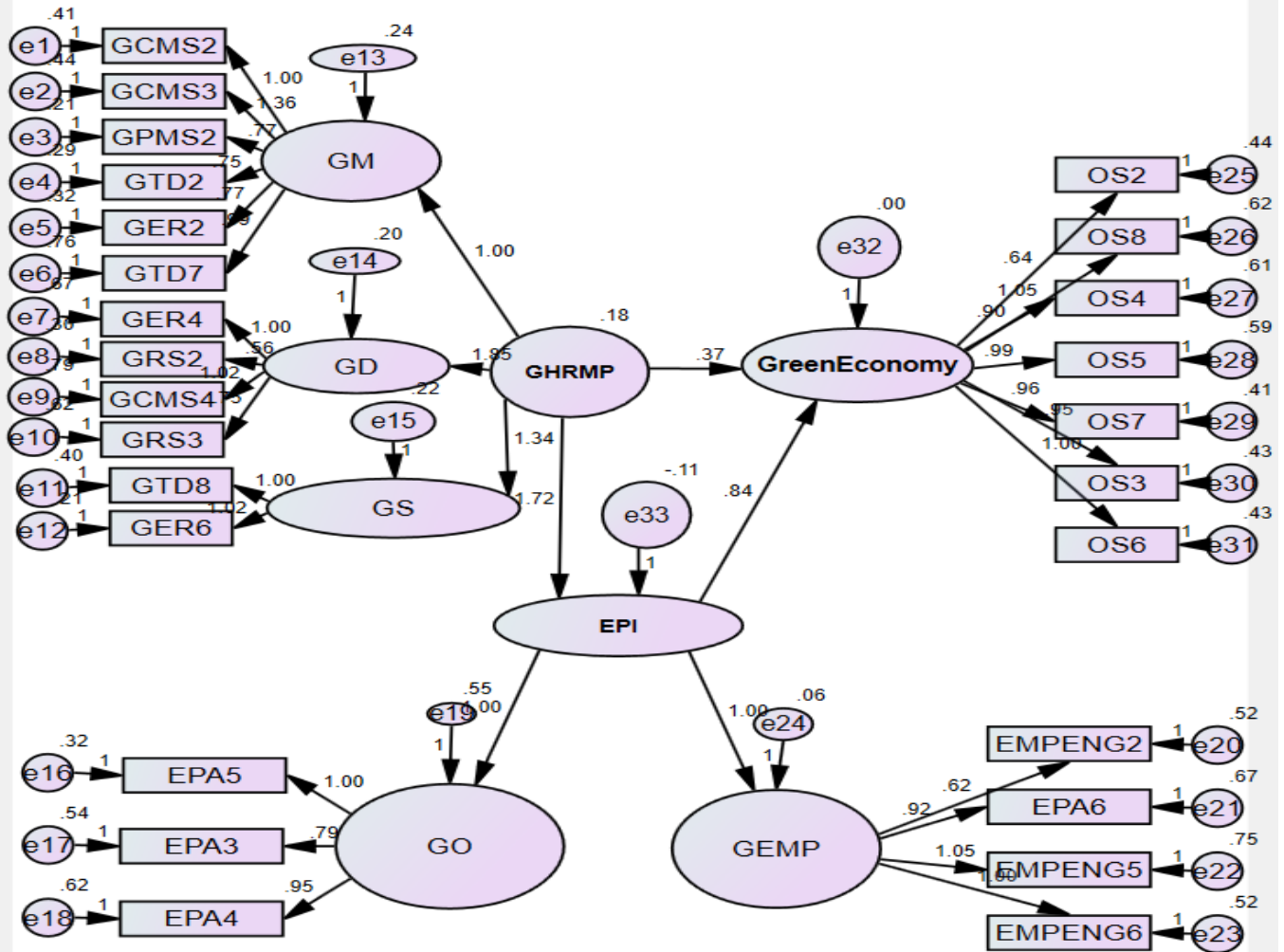
Table 1.2 signifies the values for the goodness of fit indices for Green HRM Practices' influence on the Organization Sustainability. The X²/df values are 1.821, the P-value is 0.431, the GFI is 0.935, the AGFI is 0.948, the NFI is 0.921, the TLI is 0.965, the CFI is 0.971, the RMSEA is 0.023, and the RMR is 0.041. It is interpreted from the results that the values are within the threshold limit and confirm the validity of the model fit for the Conceptual model. This confirms that the data set adequately fits the proposed Conceptual model of Green HRM Practices on organizational sustainability.

The study indicates the results of the parameters of the model. Based on the results, the study inferred that the model is fit.

Figure 1.3

Conceptual Model for the Perceived Impact of the Green HRM Practices on the Organization's Sustainability in the IT Industries

Perceived Impact of Green HRM Practices on Organization Sustainability



Source: Computed data

Based on the results of the Goodness-Of-Fit indices of the Conceptual Model, it is confirmed that the derived Conceptual Framework through the above diagram showed an overall good model. From the above diagram, the relationship among factors is tested to determine whether it is a good fit through goodness-of-fit indices.

Table 1.3

Regression Weights of Conceptual Model for the Perceived Impact of Green HRM Practices on Organization Sustainability

Hypothesis	Description of Path			Estimate	S.E.	C.R.	P	Label
H1	EPI	<---	GHRMP	1.718	0.128	13.394	***	Supported
H2	GS	<---	GHRMP	1.335	0.111	12.051	***	Supported
H3	GD	<---	GHRMP	1.846	0.144	12.821	***	Supported
H4	GreenEconomy	<---	GHRMP	0.557	0.034	16.481	***	Supported
H5	GreenEconomy	<---	EPI	0.838	0.141	5.955	***	Supported
H6	GCMS3	<---	GM	1.363	0.074	18.376	***	Supported
H7	GPMS2	<---	GM	0.774	0.045	17.159	***	Supported
H8	GTD2	<---	GM	0.748	0.048	15.508	***	Supported
H9	GER2	<---	GM	0.766	0.05	15.362	***	Supported
H10	GTD7	<---	GM	0.993	0.071	13.904	***	Supported
H11	GRS2	<---	GD	0.557	0.034	16.481	***	Supported
H12	GCMS4	<---	GD	1.017	0.058	17.513	***	Supported
H13	GRS3	<---	GD	0.752	0.048	15.837	***	Supported
H14	GER6	<---	GS	1.024	0.054	19.046	***	Supported
H15	OS3	<---	GreenEconomy	0.946	0.052	18.135	***	Supported
H16	OS7	<---	GreenEconomy	0.957	0.052	18.531	***	Supported
H17	OS5	<---	GreenEconomy	0.988	0.058	17.079	***	Supported
H18	OS4	<---	GreenEconomy	0.896	0.056	15.928	***	Supported
H19	OS8	<---	GreenEconomy	1.045	0.06	17.34	***	Supported
H20	OS2	<---	GreenEconomy	0.642	0.045	14.163	***	Supported
H21	EPA3	<---	GO	0.789	0.04	19.515	***	Supported
H22	EPA4	<---	GO	0.95	0.046	20.622	***	Supported
H23	EMPENG5	<---	GEMP	1.052	0.065	16.219	***	Supported
H24	EPA6	<---	GEMP	0.923	0.06	15.431	***	Supported
H25	EMPENG2	<---	GEMP	0.617	0.049	12.542	***	Supported

Source: Computed data

Table 1.3 signifies the overall influence of Green Human Resource Management Practices (GHRMP) on Employee Participation and Involvement (EPI). The influence of GHRMP on EPI (estimate = 1.718, $p < 0.05$). Thus, Green HRM practices positively and significantly influence Employee participation and involvement. GHRMP on Green Sustainability (estimate = 1.335, $p < 0.05$). Therefore, it can be concluded that Green HRM practices positively and significantly influence Green Sustainability (GS).

Influence of green human resource management on Green Development (estimate = 0.144, $p < 0.05$). Therefore, Green HRM practices positively and significantly influence Green Development (GD). The influence of Green Human Resource Management Practices on Green Strategy (estimate = 0.557, $p < 0.05$). Hence, Green HRM practices positively and significantly influence Green Strategy (GS). The estimate of Employee Participation and Involvement on Green Strategy (estimate = 0.838, $p < 0.05$). Hence, Employee Participation and Involvement have a positive and significant impact on the Green Strategy (GS).

The influence of Green Management on Green Compensation and Reward Management System (estimate = 1.363, $p < 0.05$). Hence, Green Management positively and significantly influences the GCMS. It is drawn that the influence of Green Management on Green Performance and Management System (estimate 0.774, $p < 0.05$). Hence, Green Management positively and significantly influences GPMS.

It is found that Green Management positively influences Green Training and Development (estimate = 0.748, $p < 0.05$). Thus, Green Management positively and significantly influences GTD. It is estimated that the influence of Green Management on Green Employee Relations (estimate = 0.766, $p < 0.05$). This indicated that Green Management positively and significantly influences GER.

It has been emphasized that the influence of Green Management on Green Training and Development (estimate = 0.993, $p < 0.05$). This leads to Green Management having a positive and significant impact on GTD. It is apparent that the influence of Green Development on Green Recruitment and Selection (estimate = 0.557, $p < 0.05$). This essentially suggests that Green Development has a significant and positive impact on GRS.

It is understood from the table that the influence of Green Development on Green Compensation and Rewards Management System (estimate = 1.017, $p < 0.05$). Hence, it can be seen that Green Development positively and significantly influences GCMS. The influence of Green Development on Green Recruitment and Selection (estimate = 0.752, $p < 0.05$). Hence, it is determined that Green Development has a positive and significant impact on GRS.

It is inferred that the overall influence of Green Sustainability (GS) on Green Employee Relations (GER). This leads to the influence of Green Sustainability on Green Employee Relations (estimate = 1.024, $p < 0.05$). Hence, it is further identified that Green Sustainability has a positive and significant impact on Green Employee Relations. The influence of Green Strategy (GS) on Opportunities (OS3) of the Organization Sustainability (estimate = 0.946, $p < 0.05$). Therefore, the Green Strategy positively and significantly influences Opportunities.

Green Strategy (GS) influence on Preference (OS7) of the Organization Sustainability (estimate = 0.957, $p < 0.05$). Therefore, the Green Strategy positively and significantly influences Preference. The influence of Green Strategy on Encouragement (OS5) (estimate = 0.988, $p < 0.05$). Therefore, it is ascertained that the Green Strategy has a significant and positive impact on the encouragement of OS.

From the results of the standardized regression weights shown through Table 1.3, it is identified that the P values demonstrate significance shown through (***) $p < 0.001$. Therefore, it has been proven that there is an impact of Green HRM Practices on Organizational Sustainability, which is transformed by the influence of Employee Participation and Involvement. Hence, the research study moves on to the concluding chapter, where a summary of findings and suggestions is attempted.

3.3.3 Impact of Green HRM Practices on Organization sustainability

The impact of the Sustainable HRM Practices on the Organization's Sustainability was measured and analysed through the SEM and ANOVA results. All the dimensions of Green HRM Practices, Employee engagement, Job Satisfaction, and Employee Perception and Awareness supported the study and yielded significant results. Therefore, the results affirm that the Green HRM Practices positively influence the Organization's Sustainability. Additionally, the demographic variables Gender, Age Group, Education, Work Experience, Size of the Organization, Sector of the Organization, and Designation affect the Organization's sustainability.

As per H25, Green Management has a significant and positive influence on Green Training and Development. Similarly, N. T. Pham, Thanh, et al. (2019) and Pinzone et al. (2019) also suggested that green training has a positive impact on employees' intention. Hypothesis H21 confirms that Green HRM practices exert a significant positive influence on green strategy, a result that aligns with the findings of Dumont et al. (2016), who demonstrated that sustainable business practices contribute positively to firm sustainability. As Norton et al. 2015 established, Green HRM Practices positively influence the employee perception and management through the Factor of Employee Participation and Involvement. The same has been achieved via the H18.

Jabbour (2019) suggested that Green Development has a significant and positive impact on GRS. Similarly, (H30) has confirmed the relationship that GRS positively and efficiently influences the Sustainability. The positive and significant support for hypotheses H24 and H26 suggests that Green HRM practices have a meaningful influence on green training and development and performance management systems.

4.1 SUGGESTIONS

Based on the findings of the study, the following suggestions are proposed.

1. Future studies should adopt longitudinal research designs to explore Green HRM practices, job satisfaction, and the integration of Artificial Intelligence in IT and other sectors. Developing combined questionnaire tools for employees across various industries is also recommended.

2. The scope of research should be extended to IT service sectors and other non-manufacturing industries to obtain more generalizable results across different organizational contexts.
3. IT industries should integrate Green Recruitment, Training, Performance Management, Compensation, and Employee Relations within sustainability and ESG policy frameworks, including clear green indicators in appraisals and structured orientation programmes.
4. Finally, factors such as higher management engagement, stakeholder needs, eco awareness, and employees' intention could be incorporated as contextual variables in future investigations to provide a more comprehensive understanding of green HRM and sustainability outcomes.
5. Improving the awareness programmes about the Green Implementation in the HRM Activities, Green Deal, and Green Tariff Programmes in the industry can enhance the employees' perception and mindset on the sustainable activities and events.
6. Organizations should publish annual ESG/sustainability reports, link incentives to ESG achievements, collaborate with NGOs and academic bodies, and implement green corporate governance supported by periodic governance audits.

4.2 PRACTICAL IMPLICATIONS

- The study offers significant practical implications for human resource managers, IT organizations, and the broader community. To begin with, HR managers should systematically embed environmentally responsible practices across all core HRM functions, including human resource planning, job analysis and design, recruitment and selection, induction, training and development, performance appraisal, reward management, and employee relations. Embedding green criteria within these functions ensures that sustainability is not treated as an isolated initiative but becomes a core organizational value. Additionally, educational institutions offering management and HR programmes should incorporate Green HRM concepts into their curriculum to cultivate future professionals who are environmentally conscious and capable of implementing green workplace strategies.
- Organizations can further enhance employee retention, satisfaction, and engagement by adopting targeted GHRM initiatives such as green performance appraisals, environmental training, and sustainability-oriented career development. Redesigning job roles to include green responsibilities and offering flexible work arrangements as telecommuting and hybrid schedules-can help reduce operational costs while improving employees' work-life balance and overall productivity. Promoting sustainable technologies, encouraging green innovation, and embedding environmental responsibilities within job descriptions positions organizations as sustainability leaders capable of attracting eco-conscious clients, investors, and talented employees.
- Beyond organizational boundaries, the societal implications of Green HRM practices are wide-ranging. By reducing carbon emissions, minimizing waste, promoting energy conservation, and fostering eco-friendly behaviour, Green HRM contributes directly to environmental protection and public well-being. These practices strengthen corporate social responsibility (CSR) performance, enhance an organization's reputation, and build long-term trust within communities. As a result, organizations adopting Green HRM play a vital role in shaping environmentally responsible citizens and driving sustainable economic development that benefits present and future generations.

5.1 CONCLUSION

Sustainable business practices clearly define objectives, focusing on specific aspects such as employee engagement, performance management, or business models. It is essential to formulate research questions to find the effects of those regulating environmental productions and corporate sustainability goals. Employee perceptions and engagement are equally important, as understanding how employees view Green HR practices can shed light on their motivation and job satisfaction. Identifying challenges and barriers to implementation, such as financial constraints or resistance to change, can help in developing practical solutions. Lastly, exploring future trends and innovations, such as AI-driven Green HR practices, strategies, and digital sustainability tracking, can provide valuable insights into how Green HR practices will evolve in response to climate change and technological advancements. A well-rounded study incorporating these aspects will offer affirmative solutions to the low-carbon business strategies.

Chennai, as a major hub in India's IT sector, may provide a unique context for studying Green HRM practices. The city's growing emphasis on technology, innovation, and sustainability initiatives makes it a relevant case study for understanding how green practices are being integrated within organizations in this sector. Focusing on an urban center like Chennai, which is likely to have a more advanced and developed infrastructure compared to rural areas, allows the researchers to capture the influence of urbanization, technological adoption, and corporate sustainability efforts in the context of GHRM.

This study examined the impact of Green Human Resource Management (GHRM) practices on sustainable development within the IT industry in Chennai. The findings reveal a positive association between GHRM and sustainable development, thereby reinforcing the importance of environmentally responsible HR practices. The study contributes to the existing literature by highlighting the critical role of GHRM in achieving Sustainable Development Goals (SDGs). Additionally, the ESG Framework aligns with these business practices, strengthening the process and economic growth.

References

1. Dey, M. (2023). Green Hrm-Leveraging Employees' Satisfaction Level in Indian Banking Sector. *Parikalpana: KIIT Journal of Management*, 19(1), 65. <https://doi.org/10.23862/kiit-parikalpana/2023/v19/i1/220831>
2. Goni, K. M., Isa, Y. Z. B. M., & Abdullah, T. B. (2023). Moderating Role of Green Transformational Leadership on the Relationship between Green Human Resource Practices and Environmental Performance of Hotels in Kano, Nigeria. *Journal of Human Resource and Sustainability Studies*, 11(03), 415–440. <https://doi.org/10.4236/jhrss.2023.113024>
3. Faisal, S. (2023). Green Human Resource Management—A Synthesis. In *Sustainability (Switzerland)* (Vol. 15, Issue 3). MDPI. <https://doi.org/10.3390/su15032259>
4. Wang, Q., Gazi, M. a. I., Sobhani, F. A., Masud, A. A., Islam, M. A., & Akter, T. (2023). Green human resource management and job pursuit intention: mediating role of corporate social responsibility and organizational reputation. *Environmental Research Communications*, 5(7), 075001. <https://doi.org/10.1088/2515-7620/acda81>
5. Gupta, A., & Jangra, S. (2024). Green human resource management and work engagement: Linking HRM performance attributions. *Sustainable Futures*, 7. <https://doi.org/10.1016/j.sfr.2024.100174>
6. Massoud, J. A., Daily, B. F., & Bishop, J. W. (2011). Perceptions of environmental management systems. *Industrial Management & Data Systems*, 111(1), 5–19. <https://doi.org/10.1108/02635571111099703>
7. Robertson, J. L., & Barling, J. (2012). Greening organizations through leaders' influence on employees' pro-environmental behaviors. *Journal of Organizational Behavior*, 34(2), 176–194. <https://doi.org/10.1002/job.1820>
8. Norton, T. A., Parker, S. L., Zacher, H., & Ashkanasy, N. M. (2015). Employee green behavior. *Organization & Environment*, 28(1), 103–125. <https://doi.org/10.1177/1086026615575773>
9. Das, V. T., Reddy, B. S., & Scholar, P. D. (2016). *Inno Space (SJIF) Impact Factor : 5.509(Morocco) EPRA International Journal of Economic and Business Review EMPLOYEE PERCEPTION TOWARDS GREEN HRM: AN INVESTIGATIVE STUDY*. www.eprawisdom.com
10. Karande, S., & Bihade, V. (2018). Green HRM Practices in Corporate Sectors-for Environmental Sustainability. In *International Journal of Innovative Science and Research Technology* (Vol. 3, Issue 7). www.ijisrt.com
11. Roscoe, S., Subramanian, N., Jabbour, C. J. C., & Chong, T. (2019). Green human resource management and the enablers of green organisational culture: Enhancing a firm's environmental performance for sustainable development. *Business Strategy and the Environment*, 28(5), 737–749. <https://doi.org/10.1002/bse.2277>
12. Arora, M., & Kaul, A. (2020). Green Human Resource Management: An Empirical Study of India. *Visegrad Journal on Bioeconomy and Sustainable Development*, 9(2), 61–66. <https://doi.org/10.2478/vjbsd-2020-0012>
13. Ababneh, O. M. A. (2021). How do green HRM practices affect employees' green behaviors? The role of employee engagement and personality attributes. *Journal of Environmental Planning and Management*, 64(7), 1204–1226. <https://doi.org/10.1080/09640568.2020.1814708>
14. Srividya, G., Padmavati, S., & Visvavidyalayam, M. (2022). Green HRM Practices in The Banking Sector-An Employee Perspective. In *Journal of Positive School Psychology* (Vol. 2022, Issue 5). <http://journalppw.com>
15. Irani, F., & Kilic, H. (2022). An assessment of implementing green HRM practices on environmental performance: The moderating role of green process innovation. *Journal of Global Hospitality and Tourism*, 1(1), 16–30. <https://doi.org/10.5038/2771-5957.1.1.1001>
16. Tanova, C., & Bayighomog, S. W. (2022). Green human resource management in service industries: the construct, antecedents, consequences, and outlook. *Service Industries Journal*, 42(5–6), 412–452. <https://doi.org/10.1080/02642069.2022.2045279>
17. Birbisa, Z., & Worku, M. (2022). Green Human Resource Management: A Systematic Literature Review and Future Research Directions. *International Journal of Organizational Leadership*, 11(3), 357–383. <https://doi.org/10.33844/ijol.2022.60334>
18. Garavan, T., Ullah, I., O'Brien, F., Darcy, C., Wisetsri, W., Afshan, G., & Mughal, Y. H. (2022). Employee perceptions of individual green HRM practices and voluntary green work behaviour: a signalling theory perspective. *Asia Pacific Journal of Human Resources*, 61(1), 32–56. <https://doi.org/10.1111/1744-7941.12342>

19. Quan, D., Tian, L., & Qiu, W. (2022). The Study on the Influence of Green Inclusive Leadership on Employee Green Behaviour. *Journal of Environmental and Public Health*, 2022(1). <https://doi.org/10.1155/2022/5292184>
20. Aggarwal, M., Dutta, M., Madaan, V., Pham, L. T., & Lourens, M. (2023). Impact of green human resource management on sustainable performance. *E3S Web of Conferences*, 399, 07005. <https://doi.org/10.1051/e3sconf/202339907005>
21. Kanan, M., Taha, B., Saleh, Y., Alsayed, M., Assaf, R., Hassen, M. B., Alshaibani, E., Bakir, A., & Tunsii, W. (2023). Green Innovation as a Mediator between Green Human Resource Management Practices and Sustainable Performance in Palestinian Manufacturing Industries. *Sustainability*, 15(2), 1077. <https://doi.org/10.3390/su15021077>
22. Narasima Venkatesh, A., Tirpude, R. R., Pathak, P., Pankajam, A., George, S., Adhav, S., & Karad, V. (2023). PERCEPTION TOWARDS GREEN HUMAN RESOURCE MANAGEMENT PRACTICES AND IMPLEMENTATION IN FINANCIAL INSTITUTIONS IN KERALA. *World Journal of Management and Economics*, 6. <https://ssrn.com/abstract=4708269>
23. Cheema, S., & Javed, F. (2017). The effects of corporate social responsibility toward green human resource management: The mediating role of sustainable environment. *Cogent Business and Management*, 4(1). <https://doi.org/10.1080/23311975.2017.1310012>
24. Mwita, K. M., & Kinemo, S. M. (2018b). The role of green Recruitment and selection on performance of processing industries in Tanzania: A case of Tanzania Tobacco Processors Limited (TTPL). *International Journal of Human Resource Studies*, 8(4), 35. <https://doi.org/10.5296/ijhrs.v8i4.13356>
25. Saeed, B. B., Afsar, B., Hafeez, S., Khan, I., Tahir, M., & Afridi, M. A. (2018). Promoting employee's proenvironmental behavior through green human resource management practices. *Corporate Social Responsibility and Environmental Management*, 26(2), 424–438. <https://doi.org/10.1002/csr.1694>
26. Pham, N. T., Phan, Q. P. T., Tučková, Z., Vo, N., & Nguyen, L. H. (2018). Enhancing the organizational citizenship behavior for the environment: the roles of green training and organizational culture. *Management*
27. Bhagyalakshmi, R., & Priyanka, M. (2018). A STUDY ON GREEN HUMAN RESOURCE MANAGEMENT PRACTICES IMPLEMENTED IN CHENNAI. *International Journal of Research and Analytical Reviews*, 5(3). www.ijrar.org
28. Anwar, N., Mahmood, N. H. N., Yusliza, M. Y., Ramayah, T., Faedah, J. N., & Khalid, W. (2020). Green Human Resource Management for organisational citizenship behaviour towards the environment and environmental performance on a university campus. *Journal of Cleaner Production*, 256, 120401. <https://doi.org/10.1016/j.jclepro.2020.120401>
29. Subashini, G. S. (2019). FACTORS STIMULATING GREEN HRM PRACTICES IN MANUFACTURING INDUSTRIES. www.jetir.org
30. Bombiak, E. (2019). Green human resource management- the latest trend or strategic necessity? *Entrepreneurship and Sustainability Issues*, 6(4), 1647–1662. [https://doi.org/10.9770/jesi.2019.6.4\(7\)](https://doi.org/10.9770/jesi.2019.6.4(7))
31. Qadir Zargar, J., & Rajiv Kumar Maheshwary, P. (2019). Issue 3 www.jetir.org (ISSN-2349-5162). In *JETIR1903M52 Journal of Emerging Technologies and Innovative Research* (Vol. 6). www.jetir.org
32. Yong, J. Y., Yusliza, M. Y., Ramayah, T., & Fawehinmi, O. (2019). Nexus between green intellectual capital and green human resource management. *Journal of Cleaner Production*, 215, 364–374. <https://doi.org/10.1016/j.jclepro.2018.12.306>
33. Hadjri, M. I., Perizade, B., Zunaidah, N., & Farla, W. (2019). Green Human Resource Management, Green Organizational Culture, and Environmental Performance: An Empirical study. *Proceedings of the 2019 International Conference on Organizational Innovation (ICOI 2019)*. <https://doi.org/10.2991/icoi-19.2019.25>
34. Mousa, S. K., & Othman, M. (2019). The impact of green human resource management practices on sustainable performance in healthcare organisations: A conceptual framework. *Journal of Cleaner Production*, 243, 118595. <https://doi.org/10.1016/j.jclepro.2019.118595>
35. Grover, P., Kar, A. K., & Ilavarasan, P. V. (2019). Impact of corporate social responsibility on reputation—Insights from tweets on sustainable development goals by CEOs. *International Journal of Information Management*, 48, 39–52. <https://doi.org/10.1016/j.ijinfomgt.2019.01.009>
36. Freitas, W. R. de S., Caldeira-Oliveira, J. H., Teixeira, A. A., Stefanelli, N. O., & Teixeira, T. B. (2020). Green human resource management and corporate social responsibility: Evidence from Brazilian firms. *Benchmarking*, 27(4), 1551–1569. <https://doi.org/10.1108/BIJ-12-2019-0543>
37. Hewapathirana, R. A., Opatha, H. H. D. N. P., & Gamage, P. (2020). Identification of some research gaps in green human resource management. *International Business Research*, 13(12), 63. <https://doi.org/10.5539/ibr.v13n12p63>
38. Pham, N. T., Vo Thanh, T., Tučková, Z., & Thuy, V. T. N. (2020). The role of green human resource management in driving hotel's environmental performance: Interaction and mediation analysis. *International Journal of Hospitality Management*, 88. <https://doi.org/10.1016/j.ijhm.2019.102392>
39. Radwan, M., & Alzgoool, H. (2020). Understanding the Dynamic Nexus between Green Human Resource Management and Environmental Performance: The Moderating Role of Green Leaders' Emotional Intelligence in the Pharmaceutical Sector of Bahrain. In *Systematic Reviews in Pharmacy* (Vol. 11, Issue 2).
40. Benevene, P., & Buonomo, I. (2020b). Green Human Resource Management: An Evidence-Based Systematic Literature Review. *Sustainability*, 12(15), 5974. <https://doi.org/10.3390/su12155974>
41. Ogbeibu, S., Jabbour, C. J. C., Burgess, J., Gaskin, J., & Renwick, D. W. (2021). Green talent management and turnover intention: the roles of leader STARA competence and digital task interdependence. *Journal of Intellectual Capital*, 23(1), 27–55. <https://doi.org/10.1108/jic-01-2021-0016>

42. Anwar, M. (2018). BUSINESS MODEL INNOVATION AND SMEs PERFORMANCE — DOES COMPETITIVE ADVANTAGE MEDIATE? *International Journal of Innovation Management*, 22(07), 1850057. <https://doi.org/10.1142/s1363919618500573>
43. Bazrkar, A., & Moshiripour, A. (2021). Corporate practices of green Human Resources Management. *Foresight-Russia*, 15(1), 97–105. <https://doi.org/10.17323/2500-2597.2021.1.97.105>
44. Ashraful, A. M., Niu, X., & Rounok, N. (2021). Effect of green human resource management (GHRM) overall on organization's environmental performance. *International Journal of Research in Business and Social Science* (2147-4478), 10(4), 99–116. <https://doi.org/10.20525/ijrbs.v10i4.1230>
45. Siva Karthika, E. P., Page, J., & Iswarya, M. (2021). Impact of Green Human Resource Management Practices on Proenvironmental Behavior of IT employees in Chennai. In *Quest Journals Journal of Research in Business and Management* (Vol. 9, Issue 5). www.questjournals.org
46. Iftikhar, U., Zaman, K., Rehmani, M., Ghias, W., & Islam, T. (2021). Impact of green human resource management on service recovery: mediating role of environmental commitment and moderation of transformational leadership. *Frontiers in Psychology*, 12, 710050. <https://doi.org/10.3389/fpsyg.2021.710050>
47. Rawat, A., & Singh, Y. (2021). Role of Green-Human Resource Management in Education Institutions: A study in Dehradun. *Webology*. <https://doi.org/10.29121/web/v18i3/22>
48. Almemari, K., Almazrouei, R., & Alnahhal, M. (2021). THE IMPACT OF GREEN HUMAN RESOURCE MANAGEMENT ON THE SUSTAINABLE PERFORMANCE OF THE MANUFACTURING COMPANIES IN THE UAE. *Journal of Southwest Jiaotong University*, 56(4), 436–447. <https://doi.org/10.35741/issn.0258-2724.56.4.39>